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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/705,821	11/13/2003	E. Michael Ackley JR.	4389-5	7840

23117 7590 04/21/2005

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EXAMINER

PHAM, HOA Q

ART UNIT PAPER NUMBER

2877

DATE MAILED: 04/21/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No. 10/705,821	Applicant(s) ACKLEY ET AL.	
	Examiner Hoa Q. Pham	Art Unit 2877	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 24 January 2005.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-23,25-37,39-42,44-53,55-63,85,86 and 97-114 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-23,25-37,39-42,44-53,55-63,85,86,97-103,105-110 and 112-114 is/are rejected.
- 7) ☒ Claim(s) 104 and 111 is/are objected to. \*
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 13 November 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>9/28/04</u> . | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

1. With respect to the amendment filed on 1/24/05, claims 1-13, 15-23, 25-37, 39-42, 44-53, 55-63, 85-86 and 97-114 are pending.

### ***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claim 86 is rejected under 35 U.S.C. 102(b) as being anticipated by Satake et al (6,097,493).

Regarding claim 86, Satake et al discloses a device for evaluating quality of granular objects comprises a driving means (18) for conveying one row of articles along a transport path; a first and second comparing means for comparing the predetermined characteristics against a given standard (threshold) and using a sorting device (19,20) for removing the articles from the transport path (see figure 5).

### ***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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5. Claims 1-13, 15-23, 25-37, 39-42, 44-53, 55-63, 85 and 97- 103, 105-110, 112-114 are rejected under 35 U.S.C. 103(a) as being unpatentable over Boyce (5,979,309) in view of Satake et al (6,097,493), Ainsworth et al (5,703,377).

Regarding claims 1, 17, 32, 48, 62, 85, 97, 100, 103, 106, 109 and 112; Boyce discloses a pellet inverting device in which pellets are transported in cavities on carrier bars mounted on a conveyor and passed beneath a first and second printing means (34, 40). Boyce suggests different surface areas of the pellet are inspected (see column 8, lines 7-35). Boyce does not teach the details of a inspection device; however, such a feature is known in the art as taught by Satake et al. Satake et al, from the same field of endeavor, teaches that that pellets (G) are transported on a conveyor mechanism (105,113, 7) has at least one throughhole configured to allow the camera unit (12) to sense the first side of the pellet shaped article that is visible through the throughhole. Since Boyce suggest the use of an inspection device, it would have been obvious to include in Boyce an optical inspection unit taught by Sataka et al for the purpose of determining the characteristics of the pellets.

Regarding claim 2, see figure 8 of Satake et al for image processing unit (20) and sorting unit (19) in communication with the first camera unit (4,12).

Regarding claim 3, see a second camera unit (4) in figure 5 of Satake et al.

Regarding claim 4, see claims 2-3 above.

Regarding claim 5, Satake et al teaches that both camera units are used for inspecting surface defects such as color, size and shape of the pellets (column 3, lines 42-57 and column 4, lines 6-26).

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Regarding claims 6, 23 and 37, Boyce teaches that the tablet, pills or capsules are inspected (see column 1, lines 17-19).

Regarding claim 7, Ainsworth et al (of record), from the same field of endeavor, teaches the use of a ring light and a camera for inspecting the surface of a cylindrical object such as fuel pellet (figure 1). It would have been obvious to one having ordinary skill in the art at the time the invention was made to replace the light source and the camera of Satake et al by a ring light and camera taught by Ainsworth et al for the same purpose of inspecting the surface of the pellets. A substitution one for another is generally recognized as being within the level of ordinary skill in the art.

Regarding claim 9, see removal mechanism (19) in figure 5 of Satake et al.

Regarding claim 10, see claim 5 above.

Regarding claim 32, same as claim 1 above; in addition, Boyce shows a plurality of carrier bars (26) in figure 3.

Regarding claim 33, see figure 8 of Satake et al for image processing unit (20) and sorting unit (19) in communication with the first camera unit and the removal mechanism.

Regarding claim 34, see a second camera unit (4) in figure 5 of Satake et al.

Regarding claims 35, see claims 2-3 above.

Regarding claim 36, Satake et al teaches that both camera units are used for inspecting surface defects of the pellets (column 3, lines 42-57 and column 4, lines 6-26).

Regarding claim 40, see removal mechanism (19) in figure 5 of Satake et al.

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Regarding claim 41, see claim 36 above.

Regarding claims 8, 17-18 and 39, Satake et al teaches that the two inspection units (4 and 12) are opposite with respect the conveyor (figure 5), it would have been obvious to one having ordinary skill in the art the time the invention was made to arrange the inspection units so that one is positioned transverse to and on an upper side of the conveyor and the other is positioned transverse to and on an inner side of the conveyor, since it has been held that rearranging parts of the invention involves only routine skill in the art. In re Japikse, 86 USPQ 70.

Regarding claims 11-12, see figures 5 and 8 of Satake et al.

Regarding claims 13 and 29-30, see column 1 lines 12, column 4, lines 6-36 of Satake et al for detecting colored portion of the pellets.

Regarding claims 15-16, it would have been obvious to one having ordinary skill in the art at the time the invention was made to replace the pellet sorting section (19) of Satake et al by a blower for the purpose of removing the pellet from the conveyor.

Regarding claims 19 and 26, see pellet discard unit (19) in figure 5 of Satake et al.

Regarding claim 20, see claim 2 above.

Regarding claims 21 and 48-52, Satake et al different characteristics are determined such as shape, size, color, etc... (column 3, lines 42-57 and column 4, lines 6-26).

Regarding claim 22, see claim 5 above.

Regarding claim 25, see claim 2 above.

Regarding claim 27, see claims 15-16 above.

Regarding claim 28, see figure 5 of Satake et al for inspecting both sides of the pellet.

Regarding claim 31, see claim 4 above.

Regarding claim 42, see claims 11-12 above.

Regarding claims 44-45, see claims 13-14 above.

Regarding claims 46-47, see claims 15-16 above.

Regarding claim 53, see claim 6 above.

Regarding claim 55, see claim 39 above.

Regarding claim 56, see claim 25 above.

Regarding claim 57-58, these claims are the same as claims 11-12 above.

Claim 59 is the similar to claim 29 above.

Regarding claim 60-61, see claims 15-16 above.

Regarding claim 63, see claim 4 above.

Regarding claims 98-99, see figure 3 of Boyce for carrier bars (16) and aperture 46.

Regarding claims 99, 101-102, 105, 107-108, 110, and 113-114 see figures 5-9 of Boyce.

***Allowable Subject Matter***

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6. Claims 104 and 111 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

### ***Response to Arguments***

7. Applicant's arguments with respect to claims 1-13, 15-23, 25-37, 39-42, 44-53, 55-63, 85-86 and 97-114 have been considered but are moot in view of the new ground(s) of rejection.

### ***Information Disclosure Statement***

8. Applicant is noted that the references listed on PTO-1449 filed on 9/28/04 have been "crossed-off" because they have been considered as listed on PTO-948 in the previous Office action.

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Following references relate to tablet inspection machine: Merrill (3,084,781), Ackley (5,655,453), Staples (4,901,865) and Satake et al (5,135,114).

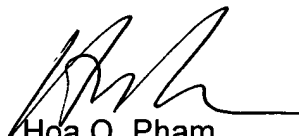
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hoa Q. Pham whose telephone number is (571) 272-2426. The examiner can normally be reached on 7:30AM to 6 PM, Monday through Thursday.



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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gregory J. Toatley, Jr. can be reached on (571) 272-2800 ext. 77. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Hoa Q. Pham  
Primary Examiner  
Art Unit 2877

HP  
April 15, 2005